


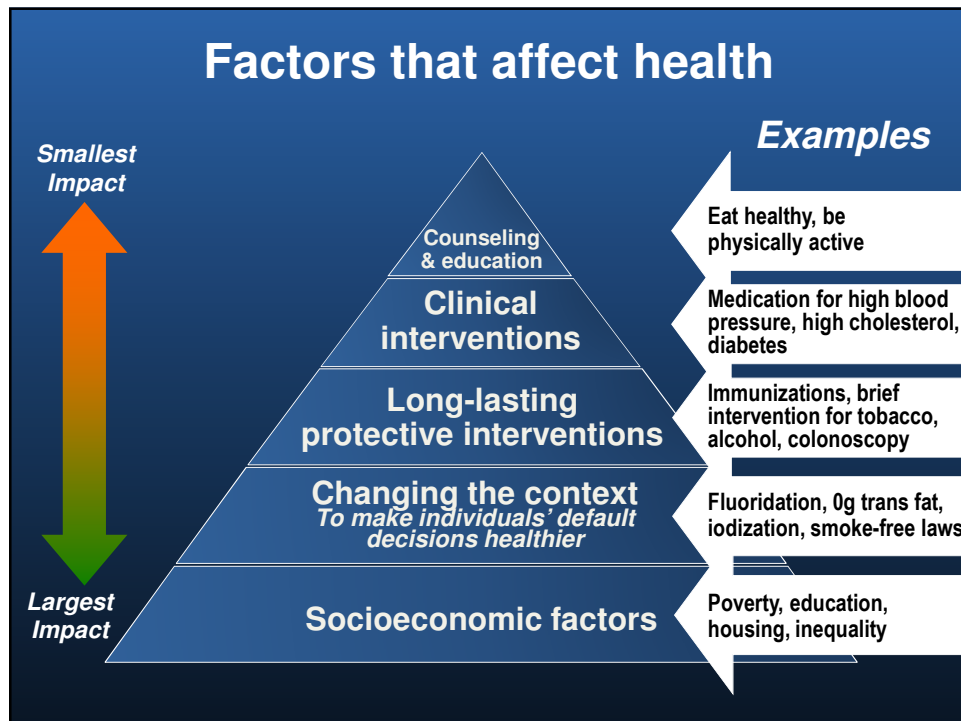
# Public Health Policies to Improve Health

kyhealthnow Oversight Team Meeting

August 7, 2014

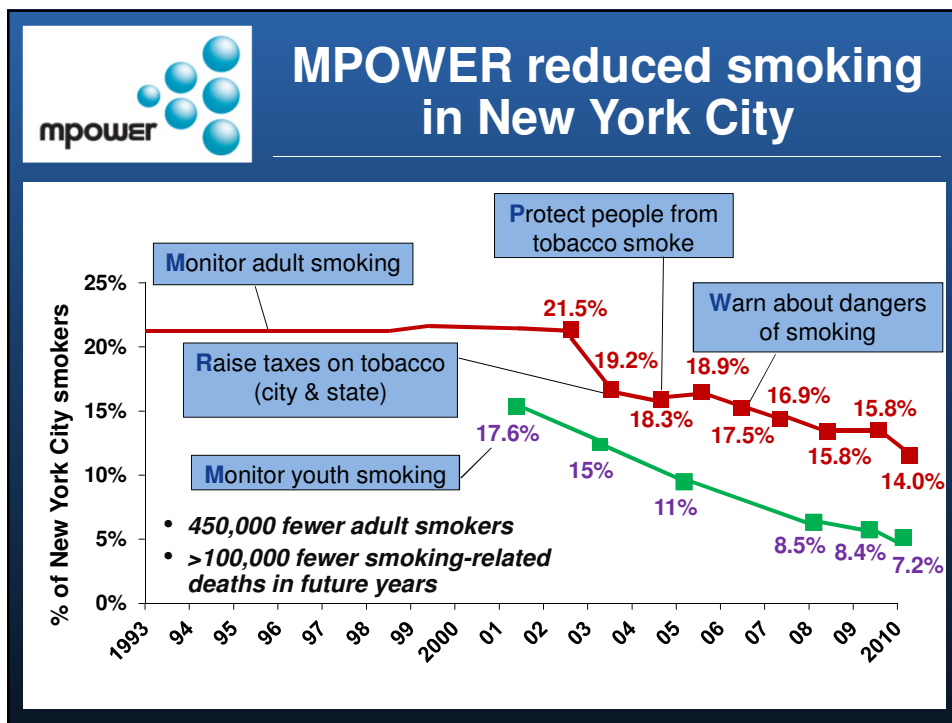
**Thomas R. Frieden, MD, MPH**  
Director  
Centers for Disease Control and Prevention





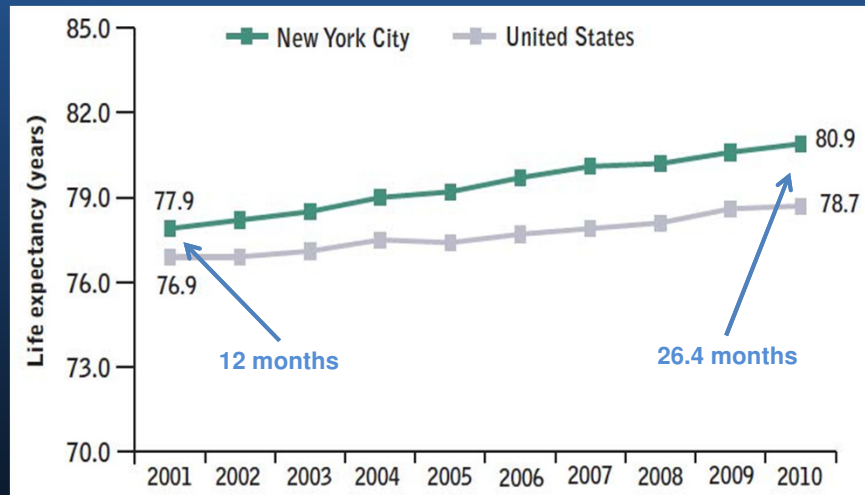
## Take Care New York: 10 priority interventions (2003)

1. Have a regular doctor or other health care provider
2. Be tobacco-free
3. Keep your heart healthy
4. Know your HIV status
5. Get help for depression
6. Live free of dependence on alcohol and drugs
7. Get checked for cancer
8. Get the immunizations you need
9. Make your home safe and healthy
10. Have a healthy baby



## Life expectancy has increased faster in NYC than in the US

*Life expectancy at birth, 2001-2010*



Sources: NYC DOHMH Bureau of Vital Statistics; National Center for Health Statistics

## Key winnable public health battle for the United States (2009)

Tobacco



Nutrition,  
Physical Activity,  
Obesity and  
Food Safety

Healthcare-  
Associated  
Infections



Motor  
Vehicle  
Injuries

Teen  
Pregnancy

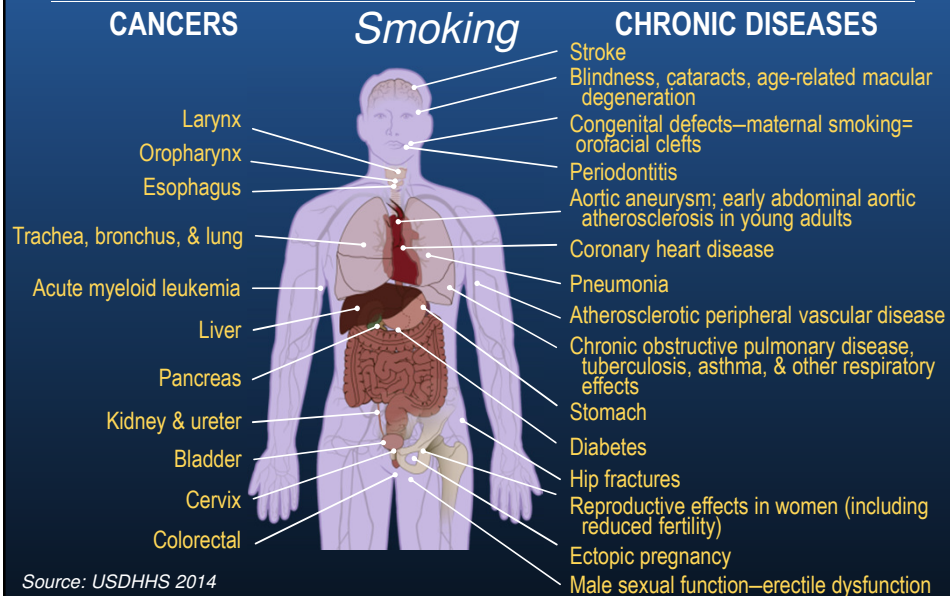


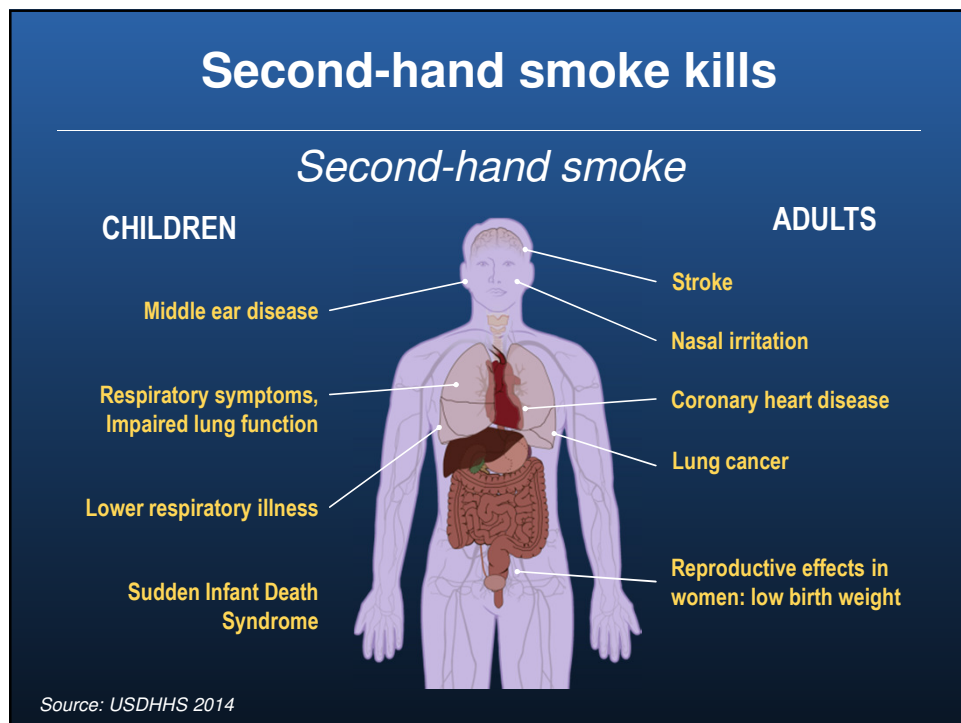
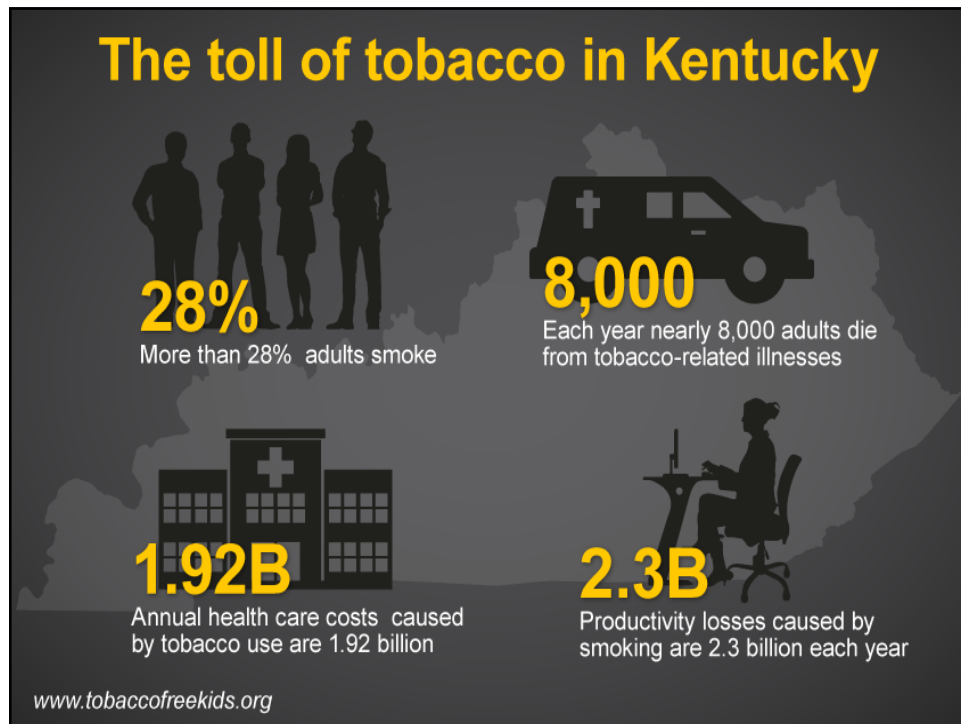
HIV

## kyhealthnow (2014)

	Baseline status	2019 target	2019 Status (if target reached)
<b>Uninsured individuals</b>	14.9%	<5%	<5%
<b>Adult smoking prevalence</b>	28.3%	↓10%	25.5%
<b>Adult obesity prevalence</b>	31.3%	↓10%	28.2%
<b>Cancer deaths (per 100,000)</b>	207.4	↓10%	186.7
<b>Cardiovascular deaths</b>	373.2	↓10%	335.9
<b>Dental health</b>			
<i>Children w/ untreated caries</i>	34.6%	↓25%	26.0%
<i>Adult dental visits (past 12 months)</i>	59.4%	↑10%	65.3%
<b>Mental hygiene</b>			
<i>Drug overdose deaths (per 100,000)</i>	23.9	↓25%	17.9
<i>Average poor mental health days/month</i>	4.9	↓25%	3.7

## Tobacco use damages virtually every part of the body





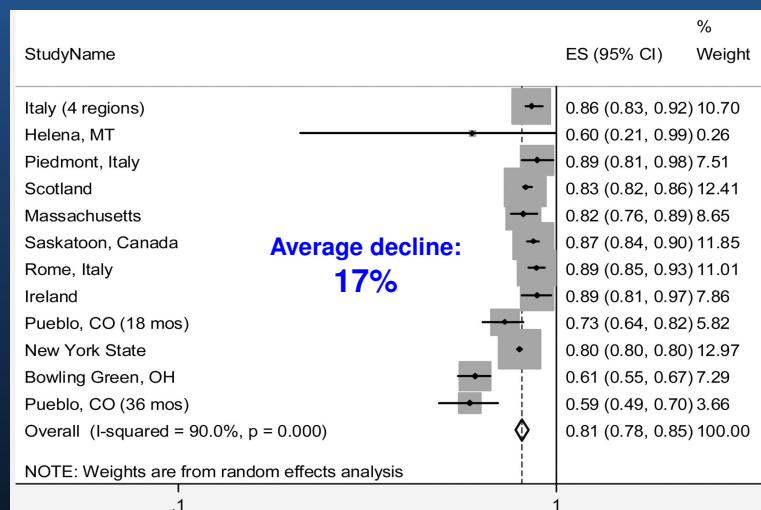
## Smoke-free public places/workplaces improve health and save lives

- No safe level of second-hand smoke
  - Smoke-free environments protect health of non-smokers and help smokers quit
- Only completely smoke-free indoor areas with no exceptions work
- Smoke-free laws are popular and do not harm business
- Worker safety measure



**More than 4,000 chemicals have been identified in tobacco smoke**

## Smoke-free policies reduce heart attacks in non-smokers



Source: Lightwood JM et al. Circulation 2009;120:1373-1379.

## 2014 Tips from former smokers campaign

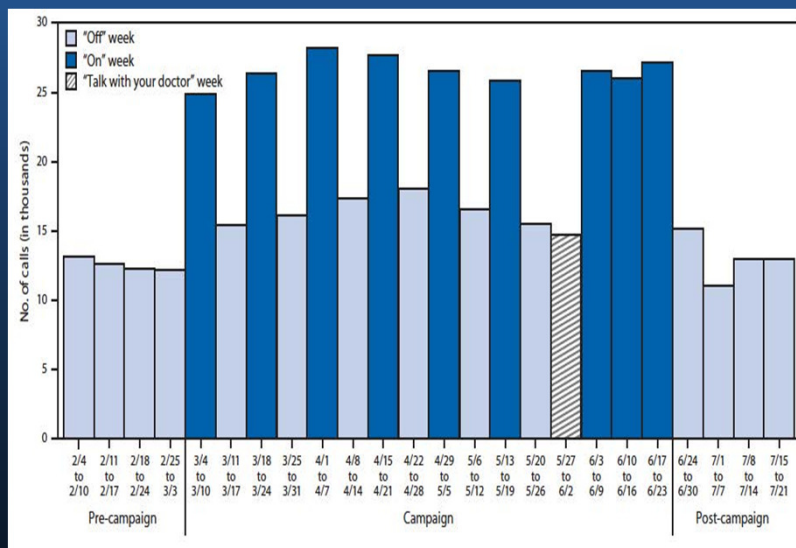
*Profiles people who are living with the significant adverse health effects due to smoking*



[www.cdc.gov/tobacco/campaign/tips/](http://www.cdc.gov/tobacco/campaign/tips/)

## 2013 Tips campaign results

*Quitline calls nearly doubled in weeks that anti-tobacco TV ads were aired*



## Results from Tips campaign, March-June 2013

TIPS FROM  
FORMER  
SMOKERS

### 2013 campaign results

**>150,000**



**>150,000**  
additional  
calls to  
**1-800-QUIT-NOW**  
(75% increase)

**2.8M**



**2.8 million**  
additional  
visitors to  
**www.cdc.gov/tips**  
(38x increase)

**\$170M**



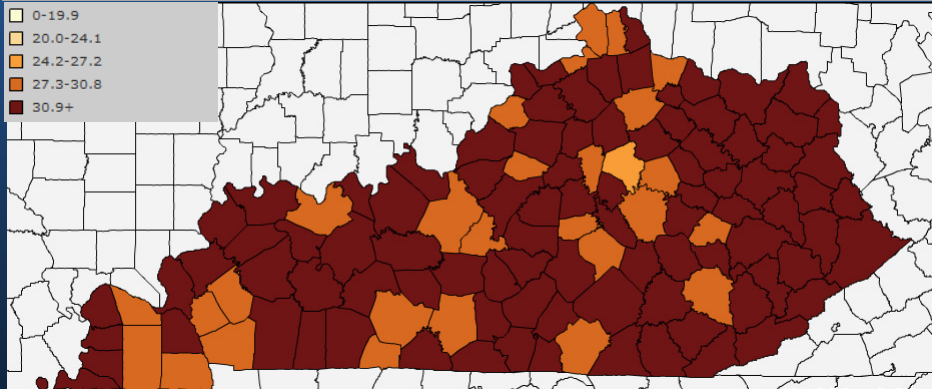
**Will save \$170**  
**million** in  
prevented health  
care costs over  
the next 3 years

## Nearly a third of Kentuckians are obese

**KY: 31.3%**

**US: 28.1%**

- 0-19.9
- 20.0-24.1
- 24.2-27.2
- 27.3-30.8
- 30.9+



[www.cdc.gov/diabetes/atlas/countydata/atlas.html](http://www.cdc.gov/diabetes/atlas/countydata/atlas.html); data for 2011



## Core interventions to prevent obesity

Schools	Worksites
<ul style="list-style-type: none"> <li>• Provide high quality PE programs</li> <li>• Increase physical activity opportunities before, during, and after school</li> <li>• Reduce screen time</li> <li>• Increase walking/cycling to school</li> <li>• Implement nutrition standards</li> <li>• Ensure only nutritious foods are sold and marketed on school campuses</li> </ul>	<ul style="list-style-type: none"> <li>• Establish worksite wellness programs to increase physical activity and improve nutrition</li> <li>• Ensure that health care benefits include nutrition and weight counseling</li> <li>• Increase availability/affordability of healthier food and beverages in cafeterias and vending</li> </ul>
Communities	Health care
<ul style="list-style-type: none"> <li>• Increase access to healthier/affordable food through corner stores and farmers markets</li> <li>• Support purchase of locally produced food</li> <li>• Promote physical activity and active transport through community design</li> <li>• Adopt food service guidelines in cafeterias, vending, and concessions</li> </ul>	<ul style="list-style-type: none"> <li>• Provide BMI screening and counseling</li> <li>• Increase support for breastfeeding</li> <li>• Provide referrals to structured lifestyle change programs such as the Chronic Disease Self Management Program and the National Diabetes Prevention Program</li> </ul>
Leverage federal, state, community, and other resources	
Rigorous monitoring	

## Heart disease and stroke are leading killers in the U.S.



**2M**

Each year more than 2 million people in the U.S. suffer from heart attacks and strokes



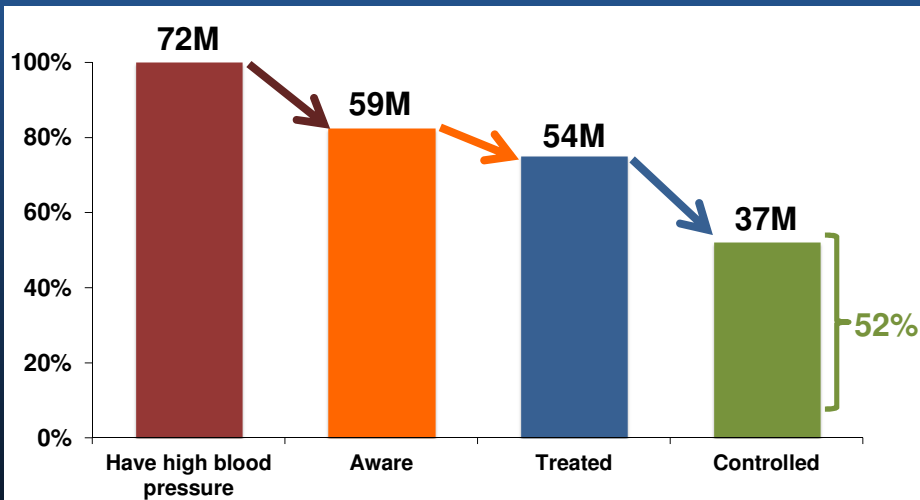
Every year 815,000 people die from cardiovascular disease (1 in every 3 deaths)



**\$444B**

These conditions incur \$273 billion in direct medical costs and \$171 billion in indirect costs every year and account for the largest single portion of racial disparities in life expectancy

**72 million US adults have hypertension**  
*But many are not aware or treated (hiding in plain sight) and barely half have it controlled*



CDC/NCHS, National Health and Nutrition Examination Survey, 2011–2012

**Million Hearts: Prevent 1M heart attacks and strokes by 2017**

**COMMUNITY PREVENTION**  
 Reduce need for treatment



**Tobacco control**



**Sodium reduction**



**Trans fat elimination**

**CLINICAL PREVENTION**  
 Improve treatment

**Focus on ABCS**



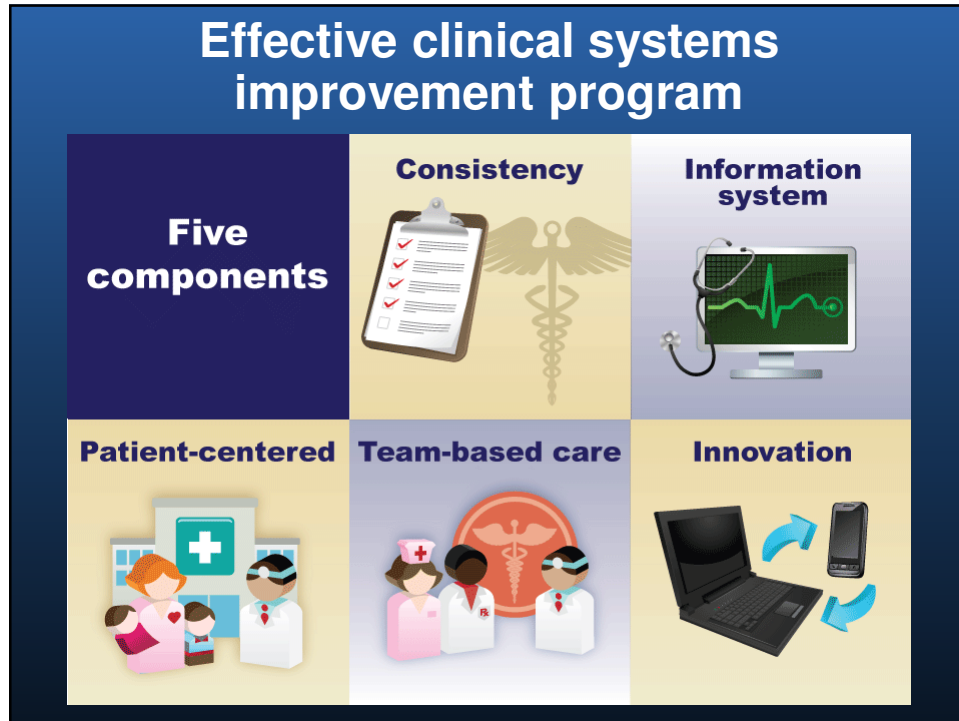
**Health information technology**



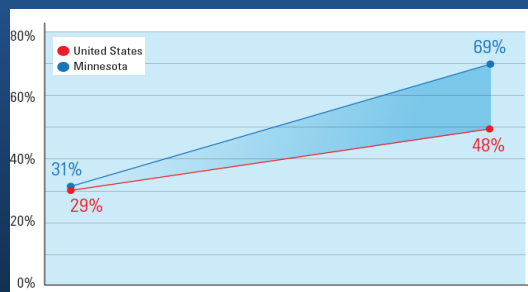
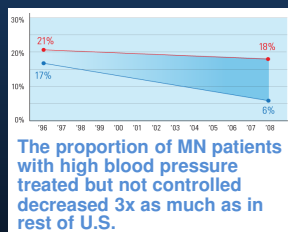
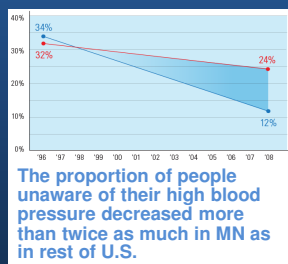
**Clinical innovations**



## Effective clinical systems improvement program



## In MN, more patients with high blood pressure are treated... and those treated are treated more effectively

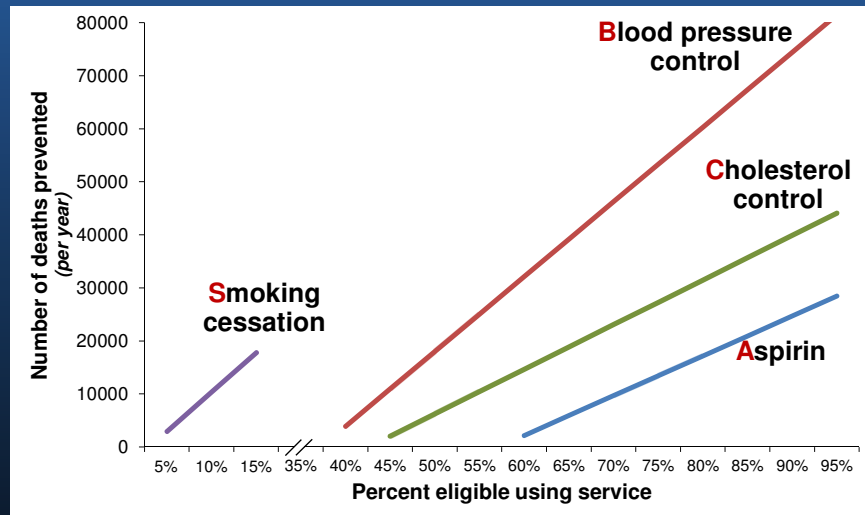


In 12 years, blood pressure control improved twice as much in MN as in the rest of the U.S.

If the U.S. had the same control rates as MN, **14 million** more Americans would have blood pressure controlled, preventing millions of heart attacks and strokes

National data: NHANES and CDC analysis; MN data: [circ.ahajournals.org/content/126/1/1852](http://circ.ahajournals.org/content/126/1/1852)

## Improved cardiovascular care could save 100,000 lives/year in U.S.



Farley TA, et al. Am J Prev Med 2010;38:600-9.

## Prescription drug abuse is a public health epidemic



**>16,500**

Every year more than 16,500 people in the U.S. die from prescription opioid-related drug overdose, more than from heroin and cocaine combined



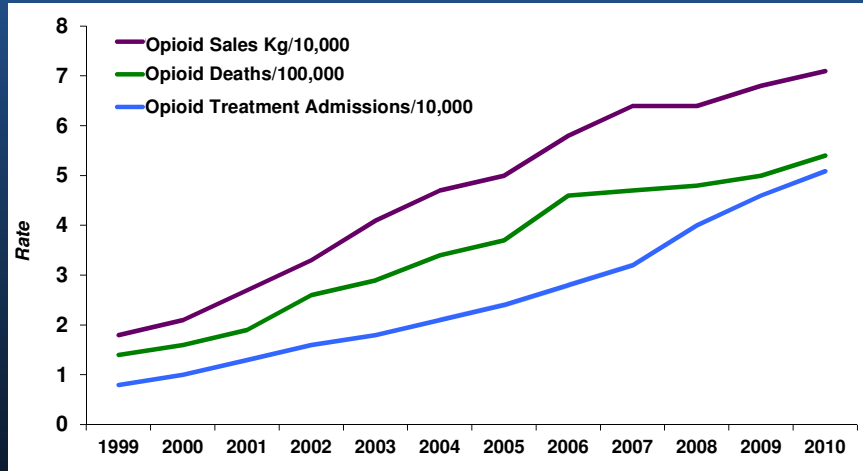
The more than 4-fold increase in opioid overdose deaths parallels the 4-fold increase in sales of these drugs over the past decade



**>\$70B**

The direct health care costs of prescription drug abuse exceeds \$70 billion a year

## Opioid overdose deaths, sales, and treatment admissions rise in parallel US, 1999-2010



National Vital Statistics System, DEA's Automation of Reports and Consolidated Orders System, SAMHSA's TEDS

## U.S. opioid prescribing in 2012

**288M**



**288M**  
prescriptions

**18B**



**18 billion**  
opioid pills

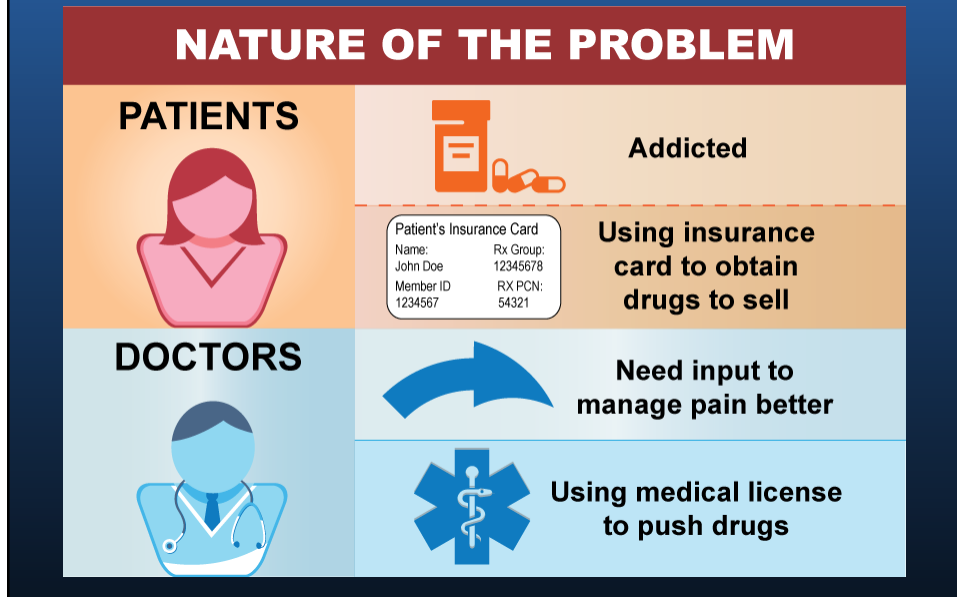
**75**



Enough pills  
to give every  
American 18  
years or older  
75 opioid pills  
in 2012

IMS Health, National Prescription Audit, 2012

## Four components of the opioid overdose problem – each needs specific approach



## Opioid doses dispensed decreased in KY after comprehensive law passed (HB1)

Drug	August 2011 through July 2012	August 2012 through July 2013	% Change
Hydrocodone	239,037,354	214,349,392	-10%
Oxycodone	87,090,503	77,022,586	-11%
Oxymorphone	1,753,231	1,138,817	-35%
Alprazolam	71,669,411	62,088,568	-13%
Methylphenidate	10,659,840	11,454,025	+ 8%
Amphetamine	13,795,147	15,065,833	+ 9%
<b>All controlled substances</b>	<b>739,263,679</b>	<b>676,303,581</b>	<b>- 9%</b>

*Buprenorphine prescriptions increased nearly 90% in the 2<sup>nd</sup> quarter of 2013 compared to the 3<sup>rd</sup> quarter of 2011*

*Source: Kentucky Office of Drug Control Policy*

## Five steps to reverse the epidemic

**To reverse  
the epidemic**

**Track trends, early  
warnings**



**Improve clinical practice  
with data, tools,  
guidance, and follow-up**



**Partnerships, esp.  
patients/families**



**Support states**

- Optimize PDMPs
- Medicaid, other insurer & pharmacy benefit manager strategies
- Policies & surveillance to improve clinical practice



**Innovate**



## Unintentional injury deaths in Kentucky

**Top 2 causes of unintentional  
injury deaths in Kentucky**

**37%**



**37% of the deaths were  
due to unintentional  
poisoning**

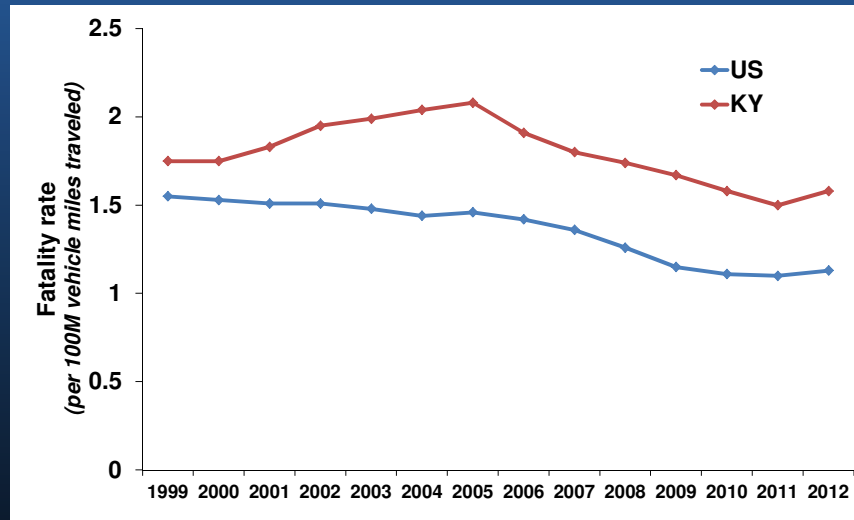
**32%**



**32% of the deaths  
were due to motor  
vehicle crashes**

*For years 2006–2011*

## Motor vehicle deaths are declining But Kentucky is still nearly 40% higher than the national average



National Highway Traffic Safety Administration, Fatality Analysis Reporting System [database]



## PREVENTION SAVES MONEY

### Implement tobacco control policies and interventions



Savings of \$193 billion per year in medical costs and lost productivity

### Prevent certain types of healthcare-associated infections



Potential cost savings of \$5 billion to \$5.5 billion annually

### Prevent motor vehicle crashes



\$99B savings in medical and lost work costs annually

### Provide routine childhood immunization



Savings of \$13.5 billion in direct costs and \$68.8 billion in total societal costs



## Maintaining health policy progress

- Priorities evolve and need to resonate within the context of your state and communities
- Identify your own focus areas – recognizing the winnable battles framework
  - Address public health priorities that have large-scale impact on health
  - Implement existing evidence-based interventions
  - Focus on efforts that can have significant impact in relatively short time
- Accurate measurement is essential to determine if progress being made



**CDC supports state and local health departments**

## Potential public health actions of a responsive government

	Promoting free and open information	Protecting individuals from harm caused by other people or by groups	Taking societal action to protect and promote health
<b>Long-standing</b>	<ul style="list-style-type: none"> <li>• Truth-in-advertising laws</li> <li>• Nutrition-facts panel</li> <li>• Pharmaceutical package inserts</li> </ul>	<ul style="list-style-type: none"> <li>• Non-adulteration of food</li> <li>• Laws against alcohol-impaired driving</li> <li>• Infectious-disease reporting</li> <li>• Worker safety</li> <li>• Protection against naturally occurring health threats (e.g., West Nile virus)</li> <li>• Tobacco excise tax</li> <li>• Alcohol excise tax</li> </ul>	<ul style="list-style-type: none"> <li>• Vaccination mandates</li> <li>• Water fluoridation</li> <li>• Micronutrient fortification of manufactured foods</li> <li>• Iodization of salt</li> <li>• Clean water, air, food</li> <li>• Elimination of lead in paint and gasoline</li> </ul>
<b>Newer</b>	<ul style="list-style-type: none"> <li>• Public reporting of health care provider performance</li> <li>• Calorie labeling at chain restaurants</li> <li>• Graphic tobacco pack warnings</li> <li>• Anti-tobacco advertising</li> <li>• Sex education for teens</li> </ul>	<ul style="list-style-type: none"> <li>• Laws requiring smoke-free workplaces and other public places</li> <li>• Alcohol ignition interlock devices for people convicted of drunk driving</li> <li>• Restrictions on sales and marketing of tobacco and alcohol (especially to children)</li> <li>• Elimination of artificial trans fat</li> </ul>	<ul style="list-style-type: none"> <li>• Zoning laws to promote physical activity (e.g., walking and bicycle paths)</li> <li>• School policies (e.g., food, physical activity, safe transportation)</li> <li>• Reduction of sodium in packaged and restaurant foods</li> </ul>

Frieden TR. NEJM, Apr. 17 2013.



Saving Lives.  
Protecting People.™

LEARN MORE ABOUT HOW  
CDC WORKS FOR YOU.



**Centers for Disease Control and Prevention**  
1600 Clifton Road NE, Atlanta, GA 30333  
Phone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348  
E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) Web: [www.cdc.gov](http://www.cdc.gov)